

CLAIMS

1. A VPN media proxy for coupling information between any of two or more VPNs and one or more external networks, the external network or networks having different addressing schemes to those of the VPNs, the VPN media proxy having
5 interfaces to the two or more VPNs, a configuration store, and an address translator arranged to translate the source and destination address of the information based on the stored configuration, and send the information on towards the modified destination address.
- 10 2. The VPN media proxy of claim 1 arranged to cooperate with a call server to set up a communication session for sending the information between an entity in any of the VPNs and the external network or networks.
- 15 3. The VPN media proxy of claim 2 arranged to cooperate with the call server to establish the configuration.
- 20 4. The VPN media proxy of claim 3 arranged to establish the configuration by providing first and second target addresses to the call server, to enable the call server to interact with originating and terminating entities to establish the communication session and establish originating and terminating addresses, the proxy also being arranged to receive from the call server an association of first and second target addresses with originating and terminating addresses for use in establishing the configuration.
- 25 5. The VPN media proxy of claim 3 arranged to establish the configuration by providing first and second target addresses to the call server, to enable the call server to pass a target address to each of originating and terminating entities of the communication session, the VPN media proxy also being arranged to receive information from the originating and terminating entities addressed to the respective
30 target address, the proxy further being arranged to associate the information addressed to that target address for use in establishing the configuration.
- 35 6. The VPN media proxy of claim 1, the VPN interfaces comprising one of IP, ATM, Frame Relay, and MPLS interfaces.
7. The VPN media proxy of claim 6, the VPN interfaces comprising an IP interface, and the configuration comprises an IP address of an originating entity, an IP address

for a first interface of the proxy, an IP address for a second interface of the proxy, and an IP address of a terminating entity.

- 5 8. The VPN media proxy of claim 1 being suitable for use with multiple VPNs using overlapping private IP addressing schemes.
9. The VPN media proxy of claim 2, the communication sessions being one of data sessions, telephony calls, or video calls.
- 10 10. The VPN media proxy of claim 2 being arranged to communicate to external entities the identity of the VPN associated with the communication session.
11. The VPN media proxy of claim 1, the interfaces comprising logical or physical ports each corresponding to a different one of the VPNs, and the determination of the
15 VPN identity is based on which of the ports is used for the communication session.
12. A server for controlling a communication session between any of two or more VPNs and one or more external networks, the external network or networks having different addressing schemes to those of the VPNs, the session passing via the
20 media proxy of claim 1, the server being arranged to cooperate with the media proxy to set up the session.
13. The server of claim 12, arranged to alert the media proxy of the identity of the
25 VPN related to the session.
14. A method of using a VPN media proxy for coupling information between any of two or more VPNs and one or more external networks, the external network or networks having different addressing schemes to those of the VPNs, the VPN media proxy having interfaces to the two or more VPNs, a configuration store, and an
30 address translator, the method having the steps of translating the source and destination address of the information based on the stored configuration, and sending the information on towards the modified destination address.
15. A method of offering a virtual private network service using the VPN media proxy
35 of claim 1.
16. A node for a network, the node having a VPN media proxy as set out in claim 1.

17. Software for carrying out the method of claim 14.

5 18. A sequence of signals to and from a VPN media proxy which is arranged to couple information between any of two or more VPNs and one or more external networks, the external network or networks having different addressing schemes to those of the VPNs, the sequence comprising a signal from an entity of one of the VPNs, addressed to an entity in the external network which appears to have an address within the address range of the respective VPN, and a signal returned from
10 the entity in the external network, and routed by the VPN media proxy back to the entity in the respective VPN.

19. The sequence of signals of claim 18, further comprising a signal from the VPN to a call server containing an identity of the respective VPN.
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